## **Listing of Claims:**

- 1. (Currently Amended) A method for normalizing a profile collected for an executing application to account for one or more actions applied to the executing application after the profile was collected, the method comprising:
- (a) predicting, based on the profile and one or more actions, an impact on the profile executing application of applying the one or more actions to the executing application; and
- (b) adjusting the profile to form a normalized profile according to the predicted impact.
- 2. (Currently Amended) A system for normalizing a profile collected for an executing application to account for one or more actions applied to the executing application after the profile was collected, the system comprising:

a predictor for predicting, based on the profile and the one or more actions, an impact on the profile executing application of applying the one or more actions to the executing application; and

an adjuster for adjusting the profile to form a normalized profile according to the predicted impact.

3. (Currently Amended) A method for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to improve detection of phase shifts in the executing application after the profile was collected, the method comprising:

- (a) collecting a first profile for the executing application;
- (b) predicting, based on the profile and the one or more actions, an impact on the first profile executing application of applying the one or more actions to the executing application;
- (c) adjusting the first profile to form a normalized profile according to the predicted impact;
  - (d) applying the one or more actions to the executing application;
  - (e) collecting a second profile for the executing application; and
- (f) detecting a phase shift in the executing application by utilizing the normalized profile and the second profile.
- 4. (Currently Amended) A system for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to improve detection of phase shifts in the executing application after the profile was collected, the system comprising:
- a profiling agent for collecting a first profile and a second profile for the executing application;
- a predictor for predicting, based on the first profile and the one or more actions, an impact on the executing application first profile of applying the one or more actions to the executing application;

an adjuster for adjusting the first profile to form a normalized profile according to the predicted impact;

an applicator for applying the one or more actions to the executing application; and

a phase shift detector for detecting a phase shift in the executing application by utilizing the normalized profile and the second profile, the second profile collected after the step of applying the one or more actions to the executing application.

- 5. (Currently Amended) A method for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to determine whether there is improvement in the execution of the executing application after the profile was collected, the method comprising:
  - (a) collecting a first profile for the executing application;
  - (b) selecting and applying one or more actions to the executing application;
- (c) predicting, based on the first profile and the selected one or more actions, an impact on the first profile executing application of applying the selected one or more actions to the executing application;
- (d) adjusting the first profile to form a normalized profile according to the predicted impact;
- (e) collecting a second profile for the executing application <u>after applying the one</u> or more actions;
- (f) evaluating the second profile against the normalized profile to determine whether there is expected improvement in the execution of the executing application; and
- (g) applying second one or more actions to undo the one or more actions applied to the executing application if there is no expected improvement in the executing application.

6. (Currently Amended) A system for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to determine whether there is improvement in the execution of the executing application after the profile was collected, the system comprising:

a profiling agent for collecting a first profile and a second profile for the executing application;

a selector for selecting one or more actions to apply to the executing application;
a predictor for predicting, based on the first profile and the selected one or more
actions, an impact on the executing application first profile of applying the selected one or more
actions to the executing application;

an adjuster for adjusting the first <del>collected</del> profile to form a normalized profile according to the predicted impact;

an action evaluator for evaluating the second profile against the normalized profile to determine whether there is expected improvement in the execution of the executing application, the second profile collected after the selected one or more actions are applied to the executing application; and

an applicator for applying the selected one or more actions and one or more actions that undo the applied one or more actions if there is no expected improvement in the executing application.

7. (Currently Amended) A method for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to

improve execution of the executing application after the profile was collected, the method comprising:

- (a) applying a first selected action to the executing application based on the collected profile;
- (b) predicting, based on the collected profile and the first selected action, an impact on the executing application profile of applying the first selected action to the executing application;
- (c) adjusting the collected profile to form a first normalized profile according to the predicted impact;
- (d) applying a second selected action to the executing application based on the first normalized profile or a subsequently normalized profile;
- (e) predicting an impact of applying the second selected action to the executing application by utilizing the first normalized profile and the second selected action;
- (f) adjusting the first normalized profile to form a second normalized profile according to the predicted impact; and
- (g) repeating steps (d) (f) for the second normalized profile and every subsequently normalized profile and selected action.
- 8. (Previously presented) A system for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to improve execution of the executing application after the profile was collected, the system comprising:

a predictor for predicting, based on the profile and the first selected action, an impact on the executing application profile of applying a first selected action to the executing application;

an adjuster for adjusting the collected profile to form a first normalized profile according to the predicted impact; and

an applicator for applying the first selected action to the executing application based on the collected profile, applying a second selected action to the executing application based on the first normalized profile and repeatedly applying each selected action from each subsequently normalized profile to the executing application.

## 9. (Canceled)

- . 10. (New) The method of claim 1, wherein the step of predicting is performed using a cost-benefit model.
- 11. (New) The method of claim 5, wherein the step of predicting is performed using a cost-benefit model.
  - 12. (New) The method of claim 11, further including:

updating said cost-benefit model if it is determined that there is no expected improvement in the executing application.

13. (New) The method of claim 5, further including: selecting and applying the one or more actions to the executing application.

- 14. (New) The method of claim 13, wherein the step of selecting the one or more actions to apply to the executing application is performed using a cost-benefit model.
- . 15. (New) The method of claim 3, wherein the step of predicting is performed using a cost-benefit model.
  - 16. (New) The method of claim 3, further including: selecting the one or more actions for applying to the executing application.
- 17. (New) The method of claim 16, wherein the step of selecting is performed using a cost-benefit model.